

Abstract

A problem of FSW spot-welding is that a bonding strength tends to be low, since an area of metallic bonding is limited to the neighborhood of a pin portion of the welding tool.

5 In order to solve the problem, after a tool(1) is inserted into a member (4) to be welded, a rotation shaft of the welding tool is tilted around a predetermined point (13) as a fulcrum, and the tip portion of the welding tool (1) is swung to enlarge a plastic flow area caused by rotation of the tool. As a result,
10 the welding strength can be increased.